

ABSTRACT

The present invention is directed to an apparatus and method for cleaning deposited material from a semiconductor fabrication system. The apparatus is made of a heating element flow detector, interposed in a gaseous flow path between a gas supply and the rest of the system. The heating element creates atmospheric conditions in the fabrication system whereby the material deposited on the walls of the system are sublimated. The sublimated material is swept away by a gaseous flow in the system. In this manner, blockages of the system can be ameliorated without cracking the environmental seal on the fabrication device. Additionally, the throughput of the system is enhanced, since the system can be cleaned on a periodic basis, and excess material may be removed more promptly and efficiently. In one embodiment, the sublimator is a heating element coupled to a power supply. The heating element heats the gas flowing past it. Pressure in the fabrication device is maintained at a level wherein the proper environmental conditions exist for direct sublimation of the deposited material into the gaseous flow, where it is swept out of the system.